SAS Flight Support

SAS Flight Support



Presentation by

Knut Anders Aabö
Manager Performance
Airport Analysis

SAS Flight Support

SAS Flight Support



Who are we?
What do we offer?
What do we stand for?
Who are our customers?
Where are we going?

SAS Flight Support

SAS Flight Support

The company:

Business scope to offer complete, coordinated and tailored products and services to the Airline industry supporting aeronautical navigation

- Based in Stockholm
- 100 employees
- Leading supplier in Europe
- Started 1946 in SAS
- Subsidiary 1995

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Product areas

- Airport Analysis
- Route Manual
- Flight planning
- FMS Data

Lido

AIR FRANCE

- Preferred partner

SM ENGINEERING


GREENLANDAIR Flights • Charter • Cargo • Fleet • News • Abo
air express
Thai
DRAGONAIR
港龍航空
SKYWAYS
ICELANDAIR
air Baltic
Premiair
Lietuvos avialinijos
Lithuanian Airlines
SAS
LUXAIR
EVA AIR
長榮航空
HAMBURG international
BRAATHENS
Alitalia
FALCON AIR
AUSTRIAN AIRLINES
SURINAM AIRWAYS
BRAATHENS
MALMÖ AVIATION
FISCHER
MALEV Hungarian Airlines

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Why do Airlines like us?

- Airline oriented
- Cost-effective
- One-stop shopping
- Easy to use
- Tailoring

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Immediate plans and projects

Electronic presentations

Mobile cockpit solutions

Vision: Direct communication to Flight deck as single mean of distribution

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What can be produced in electronic format?

- Performance calc.
- eRM
- Flight Planning
- FMS updates

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Our strategy...

…adapt to the avionics and other electronic solutions that the different manufacturers produce, not the other way around.

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In detail:

- Work together with e.g. SM-Engineering, Nokia, Aston, Collins, Northstar, Simigon
- Developing software applications with ”sub-contractors” and Aircraft manufacturers for performance calculations
- Developing eRM
- Adapting Flight planning to PC and Internet
- All Airport Obstacle Data readable by aircraft manufactures software
- Joint company for FMS

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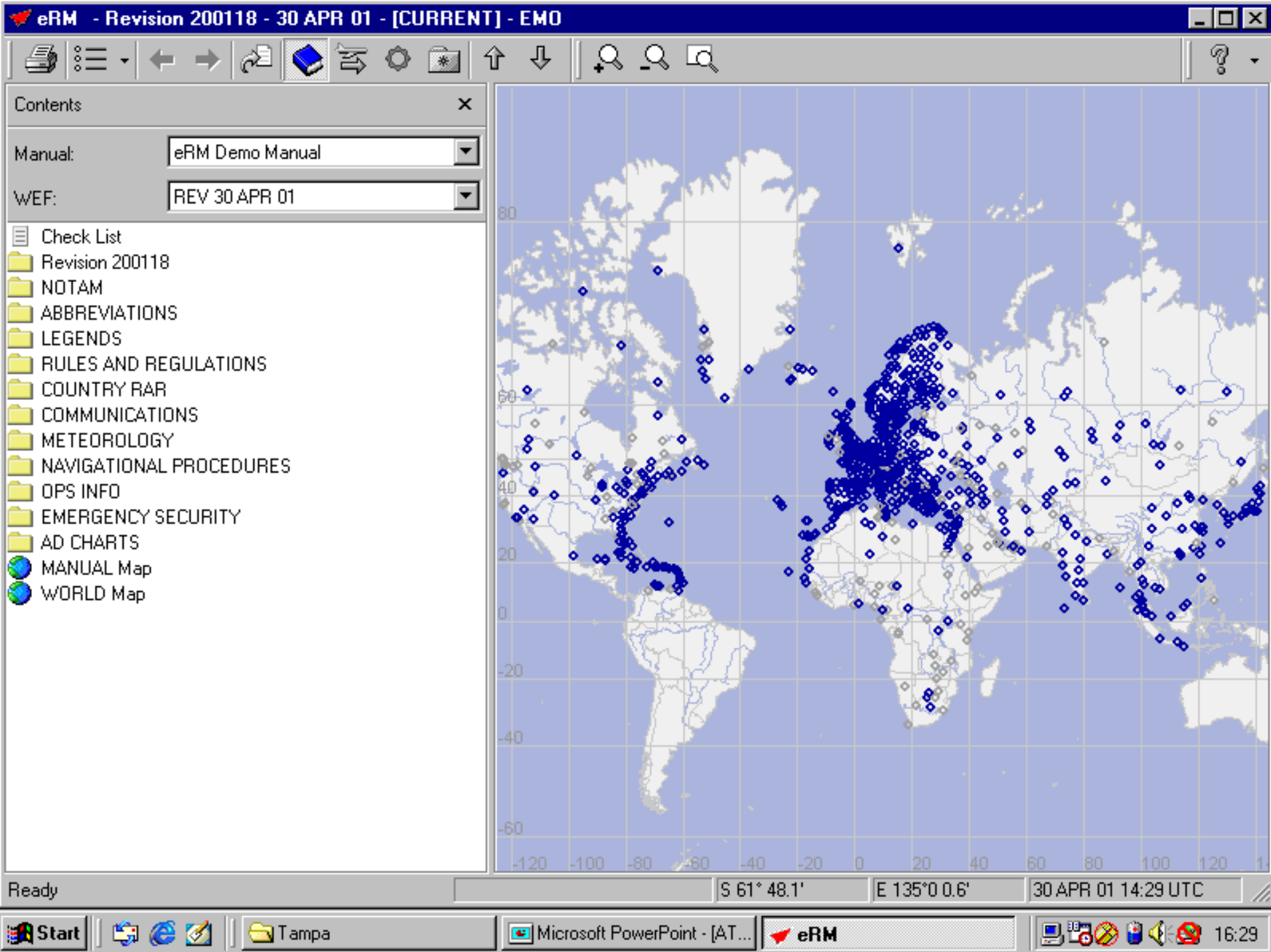
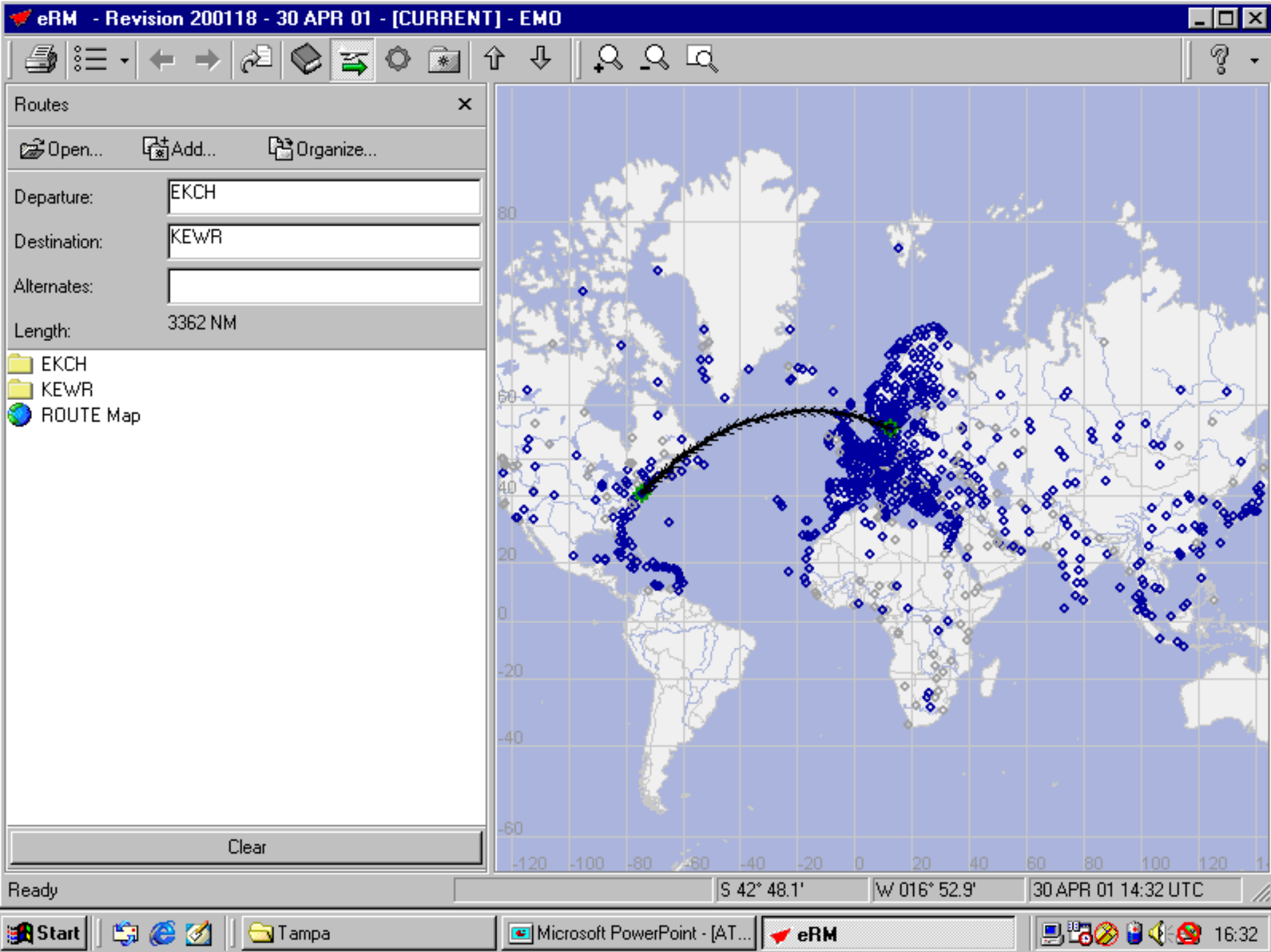
The eRM (electronic Route Manual):


eRM - Revision 200118 - 30 APR 01 - [CURRENT] - EMO
Contents
Manual:
eRM Demo Manual
WEF:
REV 30 APR 01
Check List
Revision 200118
NOTAM
ABBREVIATIONS
LEGENDS
RULES AND REGULATIONS
COUNTRY RAR
COMMUNICATIONS
METEOROLOGY
NAVIGATIONAL PROCEDURES
OPS INFO
EMERGENCY SECURITY
AD CHARTS
MANUAL Map
WORLD Map
80
60
40
20
0
-20
-40
-60
-120
-100
-80
-60
-40
-20
0
20
40
60
80
100
120
Ready
S 61° 48.1'
E 135°0 0.6'
30 APR 01 14:29 UTC
Start
Tampa
Microsoft PowerPoint - [AT...
eRM
16:29


eRM - Revision 200118 - 30 APR 01 - [CURRENT] - EMO
Routes
Open...
Add...
Organize...
Departure:
EKCH
Destination:
KEWR
Alternates:
Length:
3362 NM
EKCH
KEWR
ROUTE Map
Clear
Ready
S 42° 48.1'
W 016° 52.9'
30 APR 01 14:32 UTC
Start
Tampa
Microsoft PowerPoint - [AT...
eRM
16:32

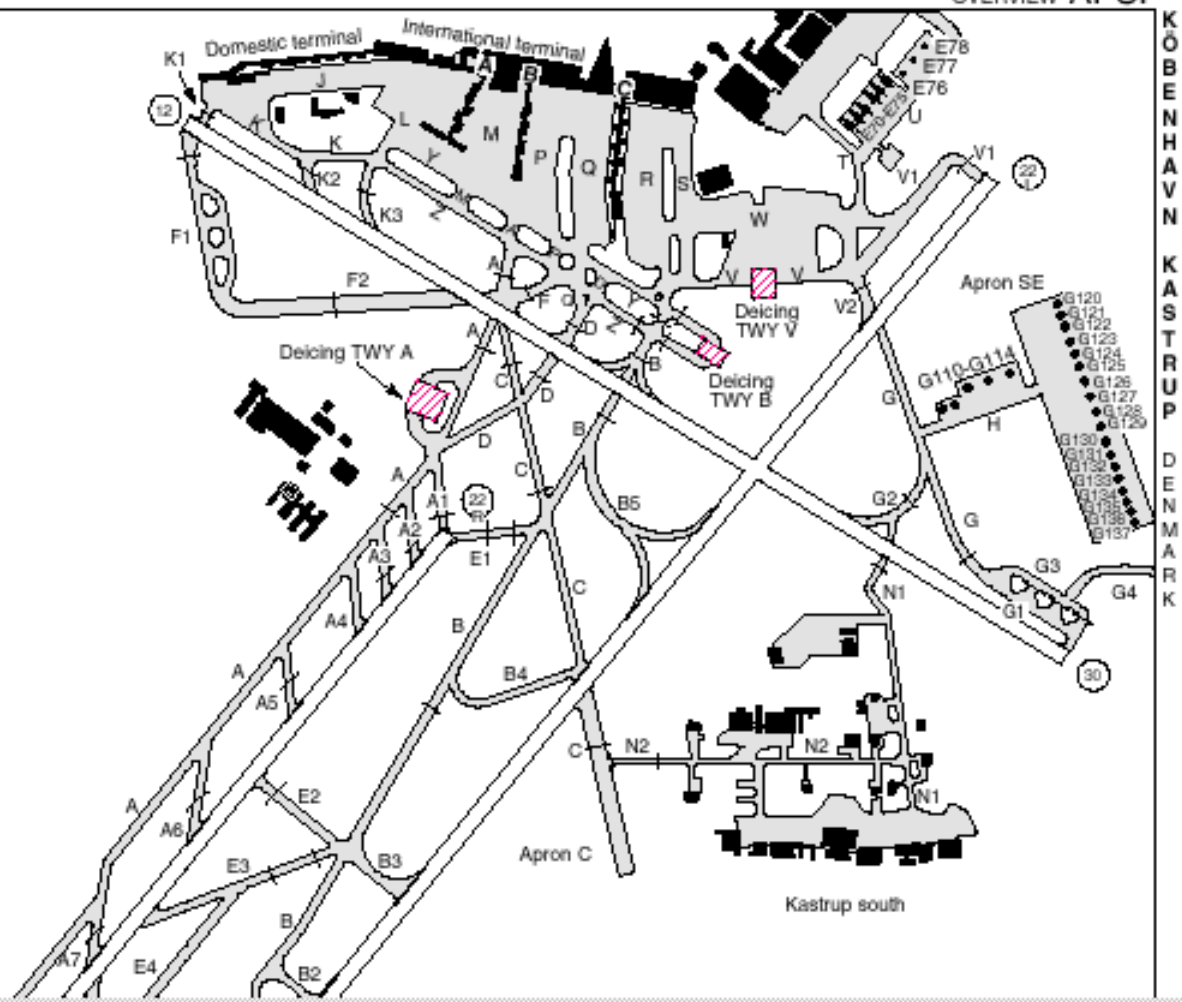
ASIR Page 3 20 APR 01

OVERVIEW APSI

Kastrup
ATIS ARR 122.750
DEP 122.850
TWR 118.100 118.575
119.900 , 119.350 HO
GND 121.725 HO
ARR 121.600
DEP 121.900
CLR DLK

Deicing
TWY A 130.650 123.400
TWY B 131.650
TWY V 131.600

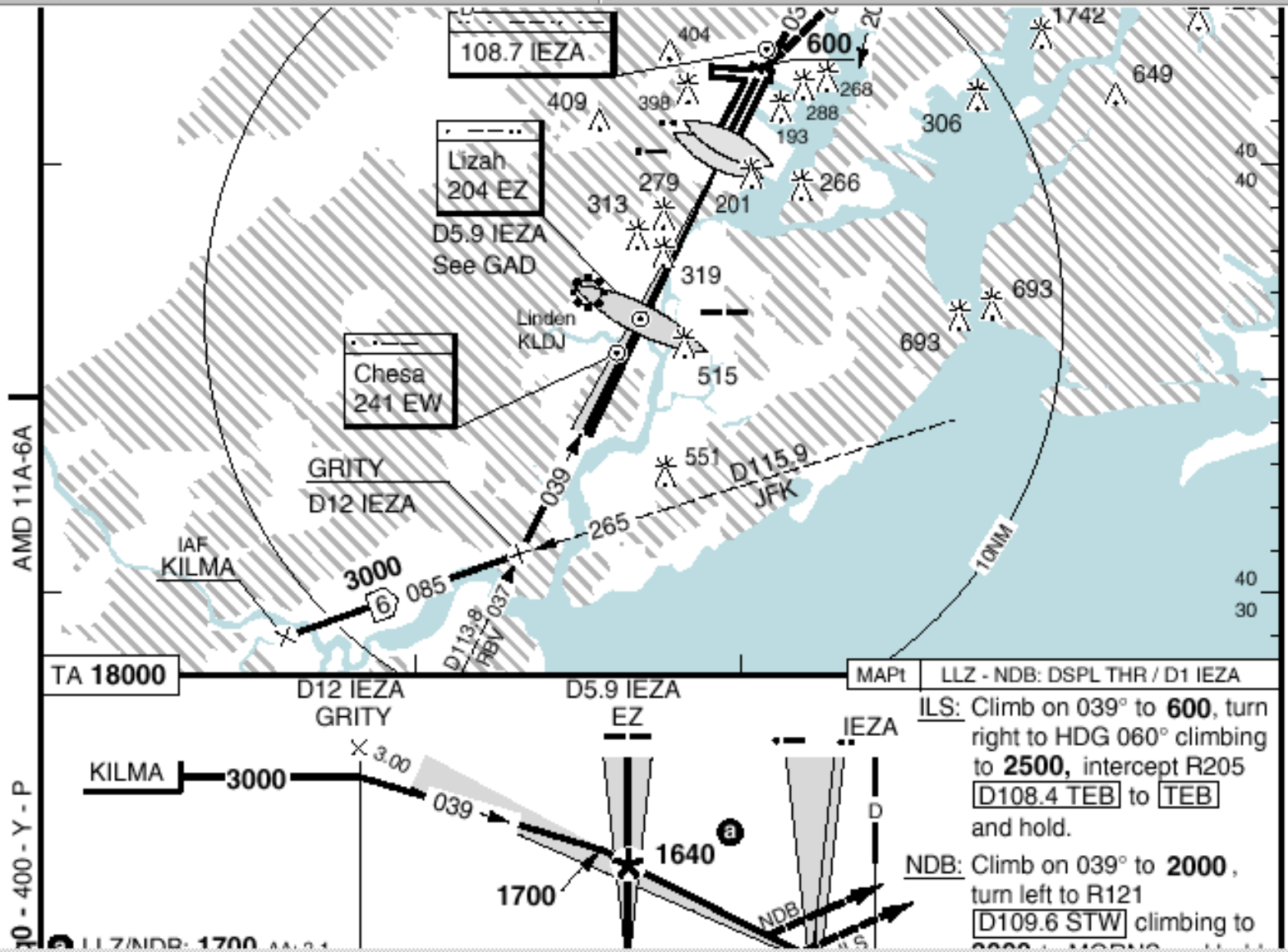
LEGENDS
Deicing platform



Previous Next All Show

NOTAM 1(3)

Zooms to a given area | 626NM / 3010NM / 497NM | N 48° 25.0' | W 001° 18.2' | 30 APR 01 14:34 UTC


108.7 IEZA
Lizah
204 EZ
D5.9 IEZA
See GAD
Linden
KLDJ
Chesa
241 EW
GRITY
D12 IEZA
IAF
KILMA
3000
085
039
265
D115.9
JFK
10NM
D113.9
RBV
037
TA 18000
MAPt
LLZ - NDB: DSPL THR / D1 IEZA
ILS: Climb on 039° to 600, turn right to HDG 060° climbing to 2500, intercept R205 D108.4 TEB to TEB and hold.
NDB: Climb on 039° to 2000, turn left to R121 D109.6 STW climbing to
D12 IEZA
GRITY
D5.9 IEZA
EZ
IEZA
KILMA
3000
039
3.00
1640
1700
NDB
AMD 11A-6A
400 - Y - P

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The RODOS Flight planning system

RODOS Client - SASOV/54

Flight1	911	Rtng				Dest Altn 1			
Flight2		Rtng				Dest Altn 2			
Flight3		Rtng				Dest Altn 3			
Flight4		Rtng				Dest Altn 4			
Flight5		Rtng				Dest Altn 5			
Flight6		Rtng				Dest Altn 6			

Options METAR | TAF | NOTAM | Acft Info.

More Options

FP0000 - TRANSACTION PROCESSED OK

SAS Scandinavian Airlines

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AIS Request [F1] | AIS Result [F2] | Flight Plan [F3] | Map [F4] | Print Text [F10] | Print Chart [F11] | Send [F12] | New Plan [ESC]

RODOS Client - SASOV/54

SK0911 [Alt+1]

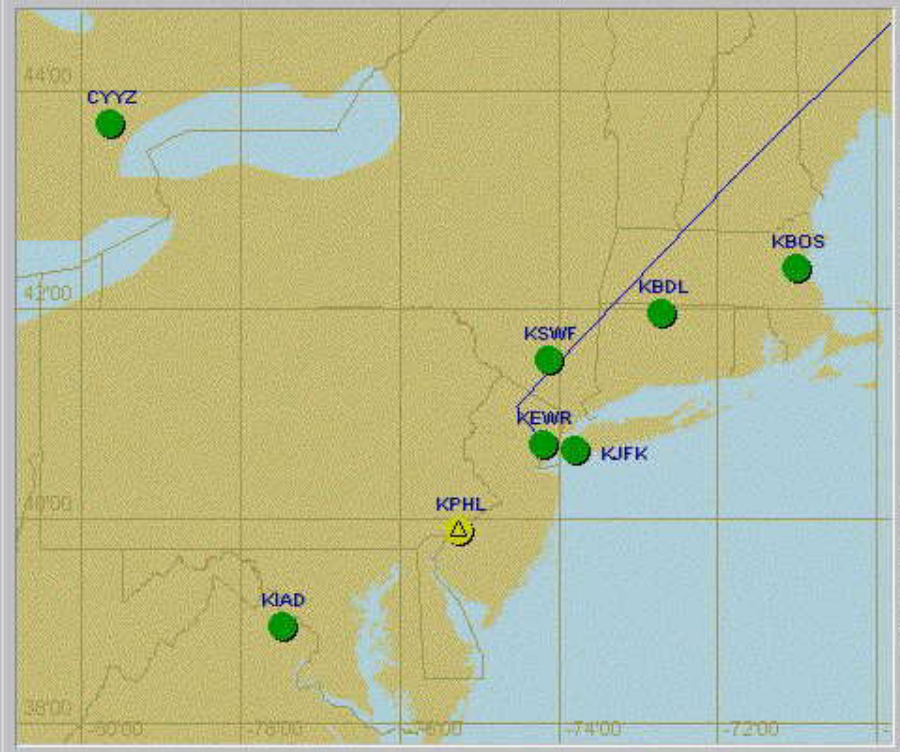
Destination Alternate:

Minima: Aircraft Category: D Aircraft Type: 767H

```
KEWR NEWARK NJ AD
RWYS  04R 22L 04L 22R 11  29
FT221130 221126Z 221212 36007KT P6SM BKN250 BECMG 1415 05009KT
      FM1800 10008KT P6SM BKN150 OVC250 TEMPO 1821 SCT030 OVC150
      FM2100 09012KT 5SM -SN BKN030 OVC080 BECMG 2324 2SM -SN BR
      OVC015 TEMPO 0004 3/4SM SN BR OVC007 FM0900 04011KT P6SM
      BKN025 OVC040
SA221100 33006KT 10SM CLR M08/M17 A3048

KEWR NEWARK NJ AD
-- NEWARK, KEWR, TEMPO RAISED MIN
  IAL 1+2: NDB OR GPS RWY 04L/R ALL CAT MDA 670(628)FT
```

RWY	CAT2/3	ILS	LLZ	NDB	VOR
04L		1800ft	549/6000ft	609/1 3/4sm	
04R	2/3	1800ft	548/6000ft	608/1 3/4sm	
11		2sm	602/2sm		842/2 3/4sm
22L		1800ft	549/6000ft		
22R		2400ft	489/5000ft		849/2 1/4sm



Show Alternates: (•) Standard ( ) Within 30 min (238 NM)

Results:

```
         *** RODOS WEATHER   ISSUED 11.57 22FEB01 ***                1
SK0911 22FEB EKCH/KEWR/10 767H LNRCE  ETA 22.45 NO NEXT LEG       MEL

E K C H   K O E B E N H A V N   AD
RWYS      04R  22L  04L  22R  12   30
FC221221 32015KT 9999 SCT030 BECMG 1921 01012KT
FT221000 221040Z 221812 33012KT 9999 SCT025 BECMG 2022 03010KT
SA221150 30021KT 9999 FEW035 03/M07 Q0998 NOSIG

K E W R   N E W A R K   N J   AD
RWYS      04R  22L  04L  22R  11   29
FT221130 221126Z 221212 36007KT P6SM BKN250 BECMG 1415 05009KT
         FM1800 10008KT P6SM BKN150 OVC250 TEMPO 1821 SCT030 OVC150
         FM2100 09012KT 5SM -SN BKN030 OVC080 BECMG 2324 2SM -SN BR
         OVC015 TEMPO 0004 3/4SM SN BR OVC007 FM0900 04011KT P6SM
         BKN025 OVC040
SA221100 33006KT 10SM CLR M08/M17 A3048

E S M S   M A L M O E - S T U R U P   AD
RWYS      17   35
FC221221 33017G30KT 9999 SCT024
FT221000 221010Z 221812 01014KT 9999 SCT020
SA221150 30022KT 9999 SCT031 02/M05 Q0997 REGR 1712//95
         RWY 17: DAMP, COVER 11-25 PCT, DEPTH NOT MEASURABLE,
         BA GOOD

SNOWTAM  VALID FROM: 22FEB01 04.00
B)02220400
C)17 F)1/1/1 G)XX/XX/XX H)5/5/5 N)1/GOOD
```

AIS Request [F1] | AIS Result [F2] | Flight Plan [F3] | Map [F4] | Print Text [F10] | Print Chart [F11] | Send [F12] | New Plan [ESC]

RODOS Client - SASOV/54

SK0911 [Alt+1]

Predefined: Alt+7 Select Area

Airports: Alt+8

Show ETOPS Circles

Show Upper Winds at FL 310

Show Significant Weather

Jetstreams Tropopause

Storms Clear Air Turbulence

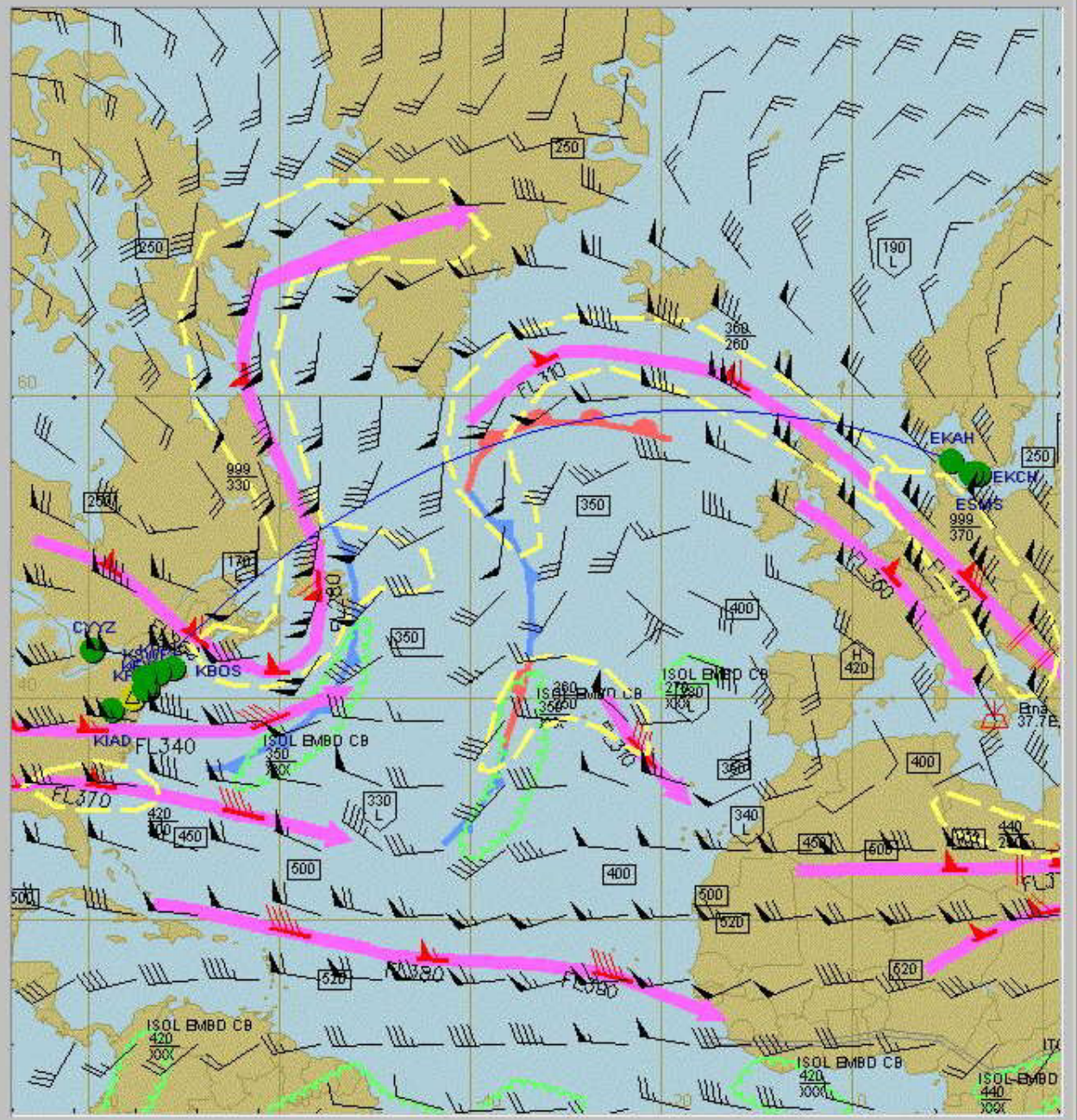
Clouds Volcanoes

Frontal Systems

Date/Time: 22FEB 1400 UTC

Forecast: 2212

PRESS SEND TO UPDATE MAP



AIS Request [F1] | AIS Result [F2] | Flight Plan [F3] | Map [F4] | Print Text [F10] | Print Chart [F11] | Send [F12] | New Plan [ESC]

RODOS Client - SASOV/54

SK0911 [Alt+1]

Flight No. SK0911 A/C Reg. Date

Routing EKCH KEWR 10

ZFW LW TOW FCAP

Altn. 1 KJFK Take-Off Altn.

Plan Dep. Dist. Enrt. Altn. App. Time

Cruise SELCAL ETD/ETA

Temp. Prog. Eco. Tank

Taxi Fuel Comp. Fuel Extra Fuel

POR Addr1 Addr2

FL Prof.

RNO/ERA EKCH/BIKF/CYYR/KEWR

Fchk/Rtng

Notes

Wind

FP000 - TRANSACTION PROCESSED OK - FUEL MSG NOT SENT

Show Windplan

Results:

```
                    *** RODOS ETOPS-PLAN ***

SK911   22FEB01  EKCH-KEWR-10

ETP          ENRT ALTN   ESAD  BURN  TIME  CF   HLDG  MISAP REQ FUEL
ETP01        EKCH/BIKF    603  10.6  1:27  0.5   1.3   1.1    13.5

ETP02        BIKF/CYYR    691  12.0  1:38  0.6   1.2   1.1    14.8

ETP03        CYYR/KEWR    484   7.9  1:09  0.4   1.1   1.1    10.5


EN-ROUTE ALTERNATE TIME WINDOWS

EKCH         0835 - 1745

BIKF         1116 - 2035

CYYR         1614 - 2124

KEWR         1912 - 1914

                    *** RODOS FLIGHTPLAN ***


ETOPS ENRT ALTN:    EKCH BIKF CYYR KEWR

ROUTING 10 NOT TO BE USED OPERATIONALLY
                                                        CRUISE M80

SK911/BFDE    22FEB01  LN-RCE/767H  EKCH-KEWR-10   SKED DEP 0935   1

FL 310/ETP02/350                                    SKED ARR 1820

TTL DIST 3380  TTL ESAD 3730  WC  -43  F-F +5.5   TIME  8:39/8:45

PAX ..../..../....     ZFW  128.4/.....     LDG FIELD ELEV    18  FT

LI .....                TOF   51.7/.. ..

MAC.....                TOW  180.1/.. ..
```

AIS Request [F1] | AIS Result [F2] | Flight Plan [F3] | Map [F4] | Print Text [F10] | Print Chart [F11] | Send [F12] | New Plan [ESC]

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The TODC Performance Software:

- Produced by SM-Engineering
- For cockpit use on a laptop
- Operational tool in the office
- Handheld computers
- Mobile solutions

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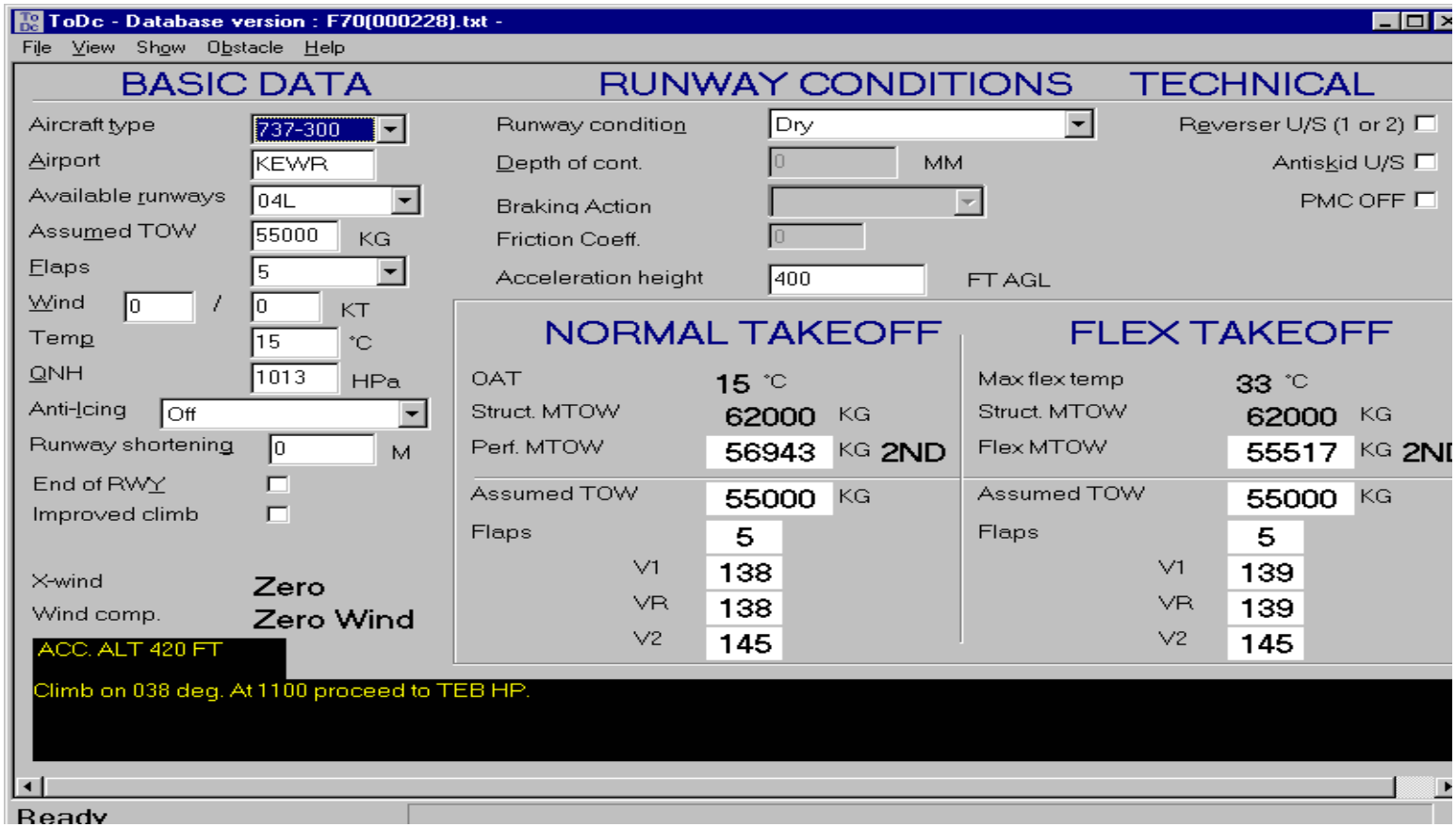

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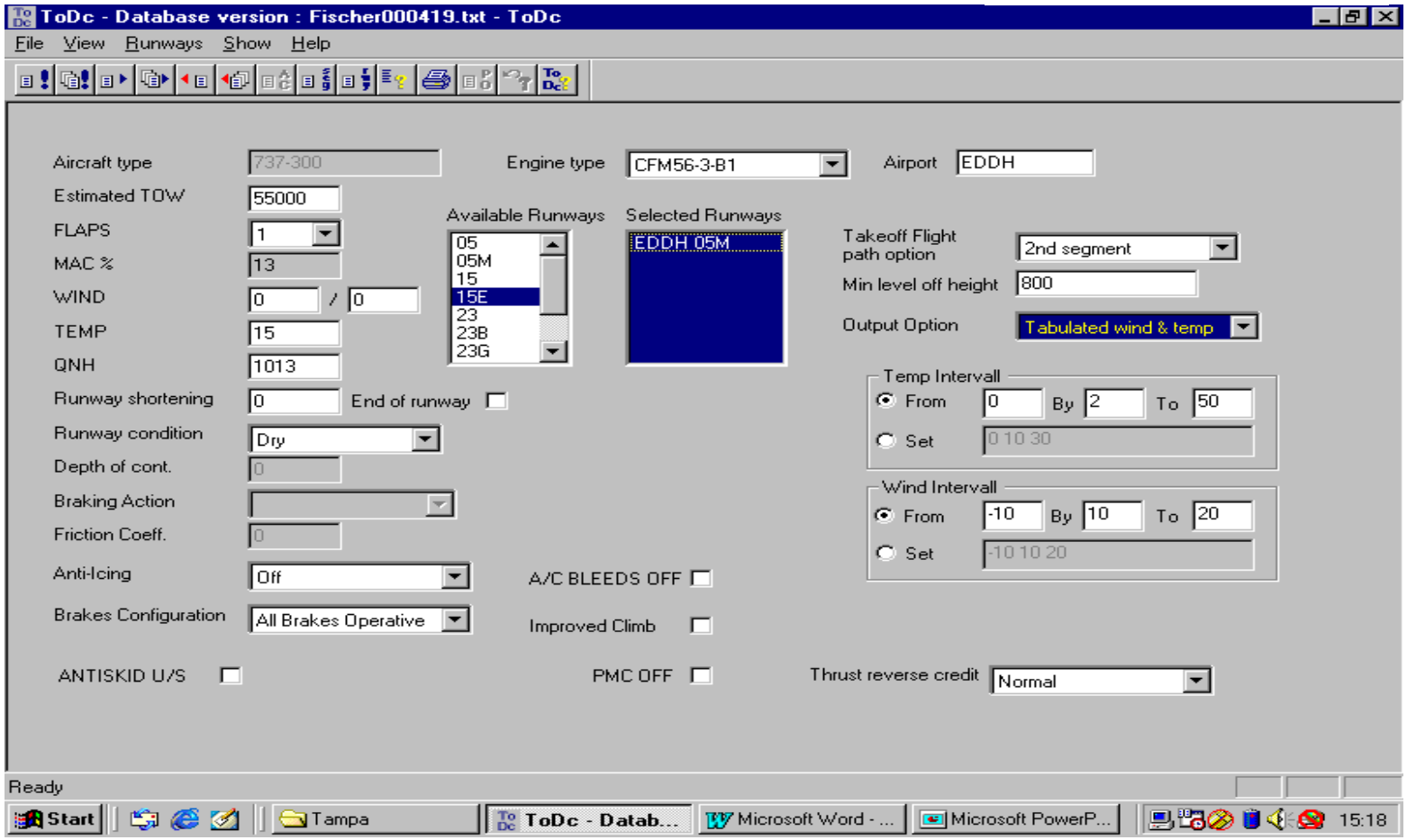

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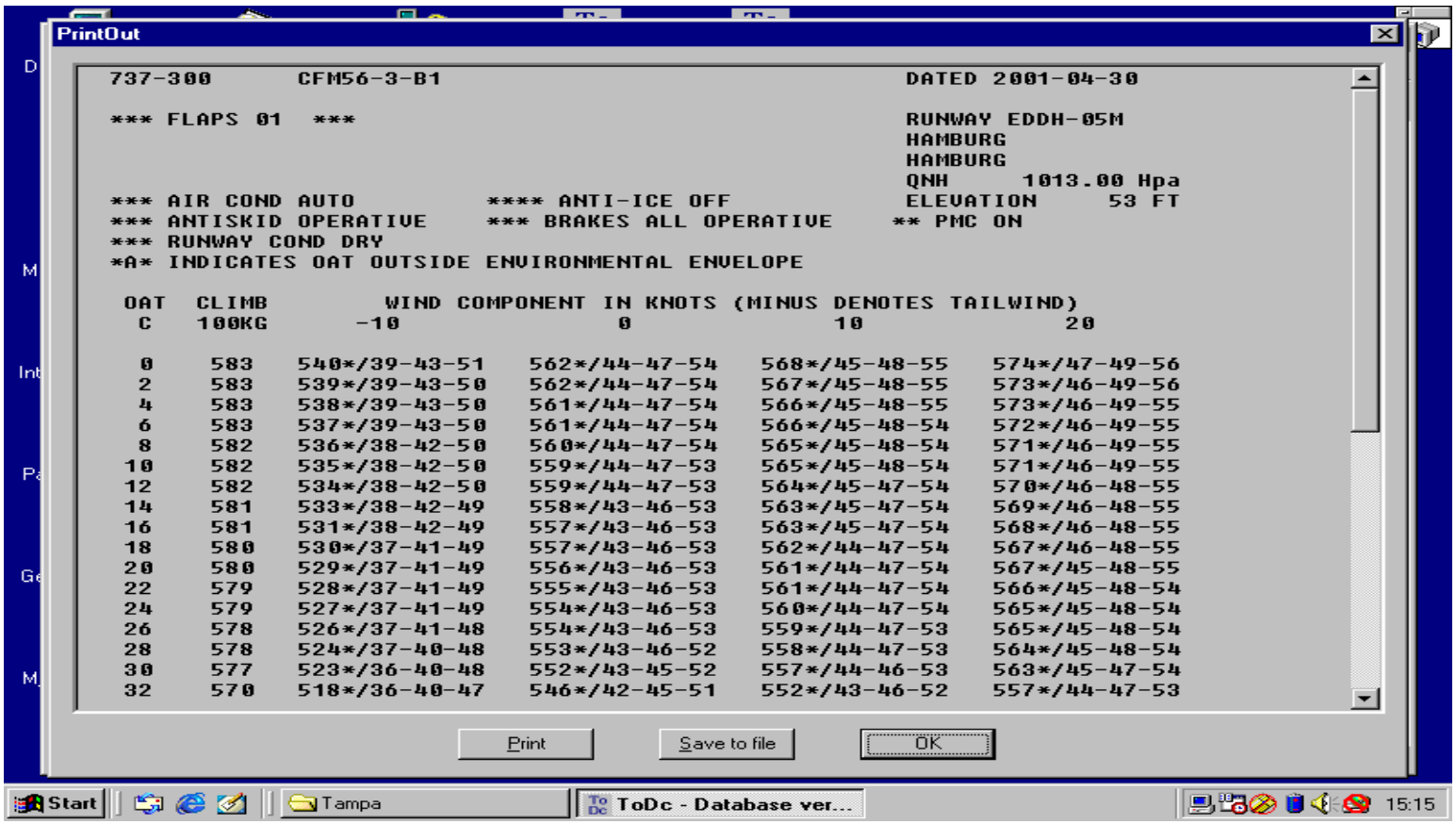

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The TODC Performance Software are available for the following aircraft types:

SM ENGINEERING

DC 9-41	**A 321**
MD-80/209/217/219	**A 330**
MD-87	**A 340**
MD-90	**EMB 135**
MD-11	**EMB 145**
777-200	**F28 Mark 1000**
767-300	**F28 Mark 4000**
737-300	**F70**
737-400	**F100**
737-500	**DHC-8-Q400**
737-600	**RJ 70**
737-700	**RJ 85**
737-800	**RJ 100**
	BAE146

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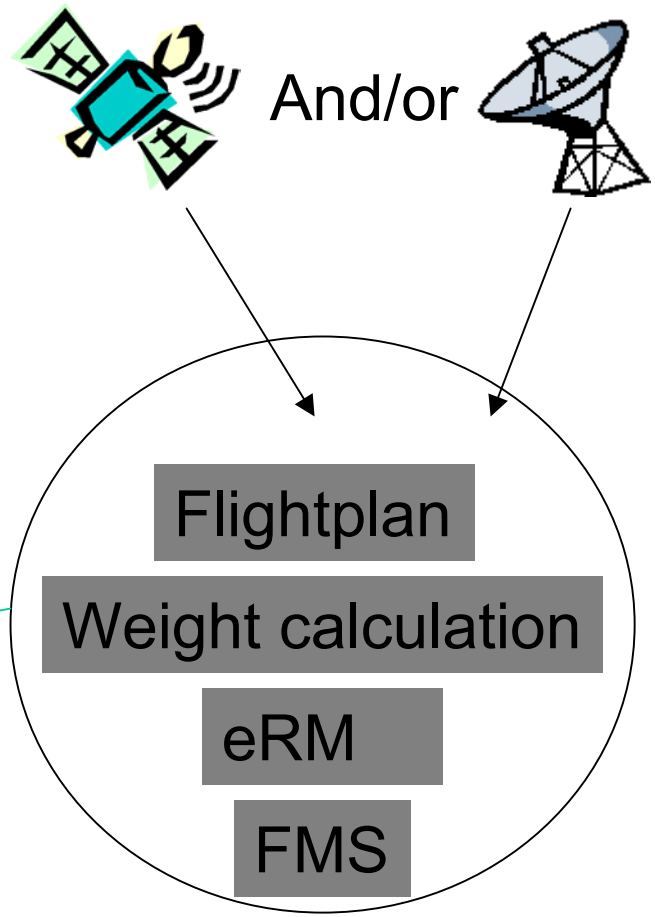
The future is here!

The Wireless Aviator



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The Wireless Aviator

-Mobile aviation solutions are available

- Performance
- W/B calculation
- eRM Updates
- E-mail

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The Wireless Aviator

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A project with the following participants:

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The Wireless Aviator

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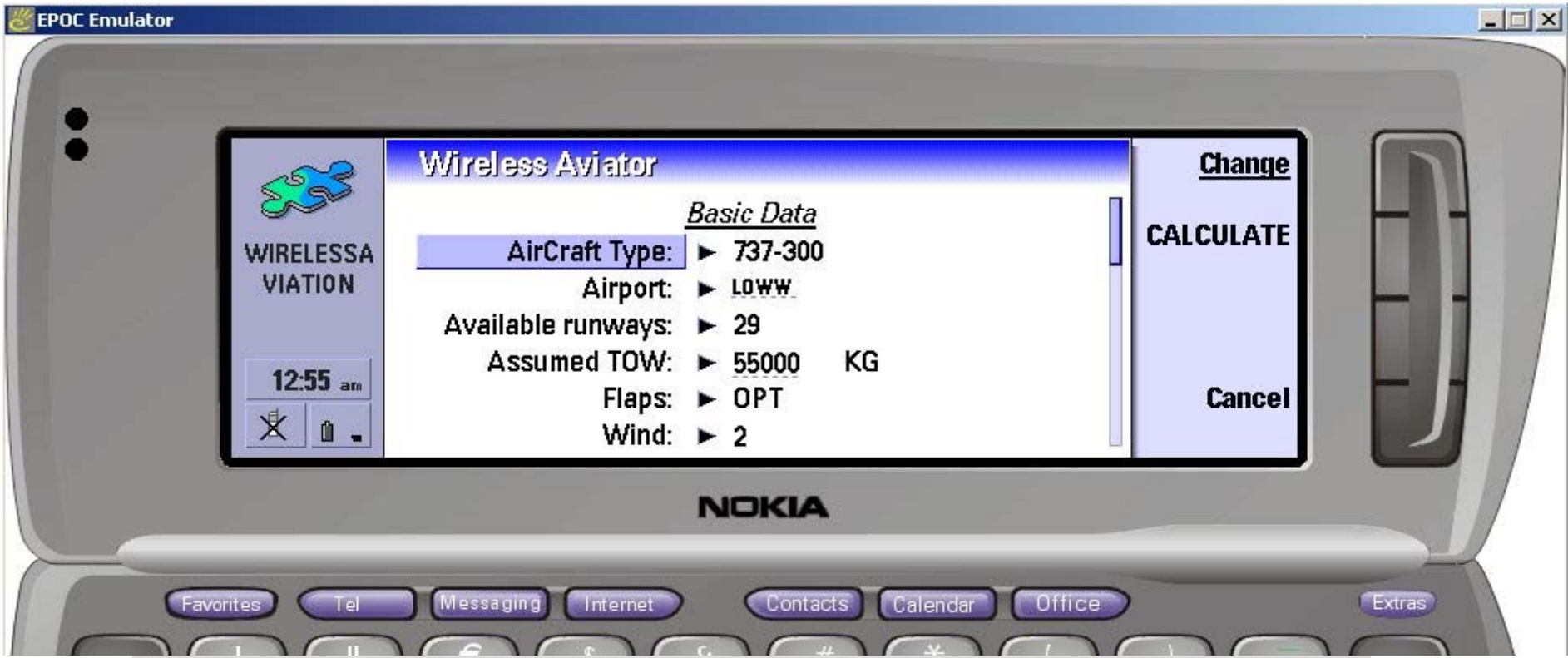

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The Wireless Aviator

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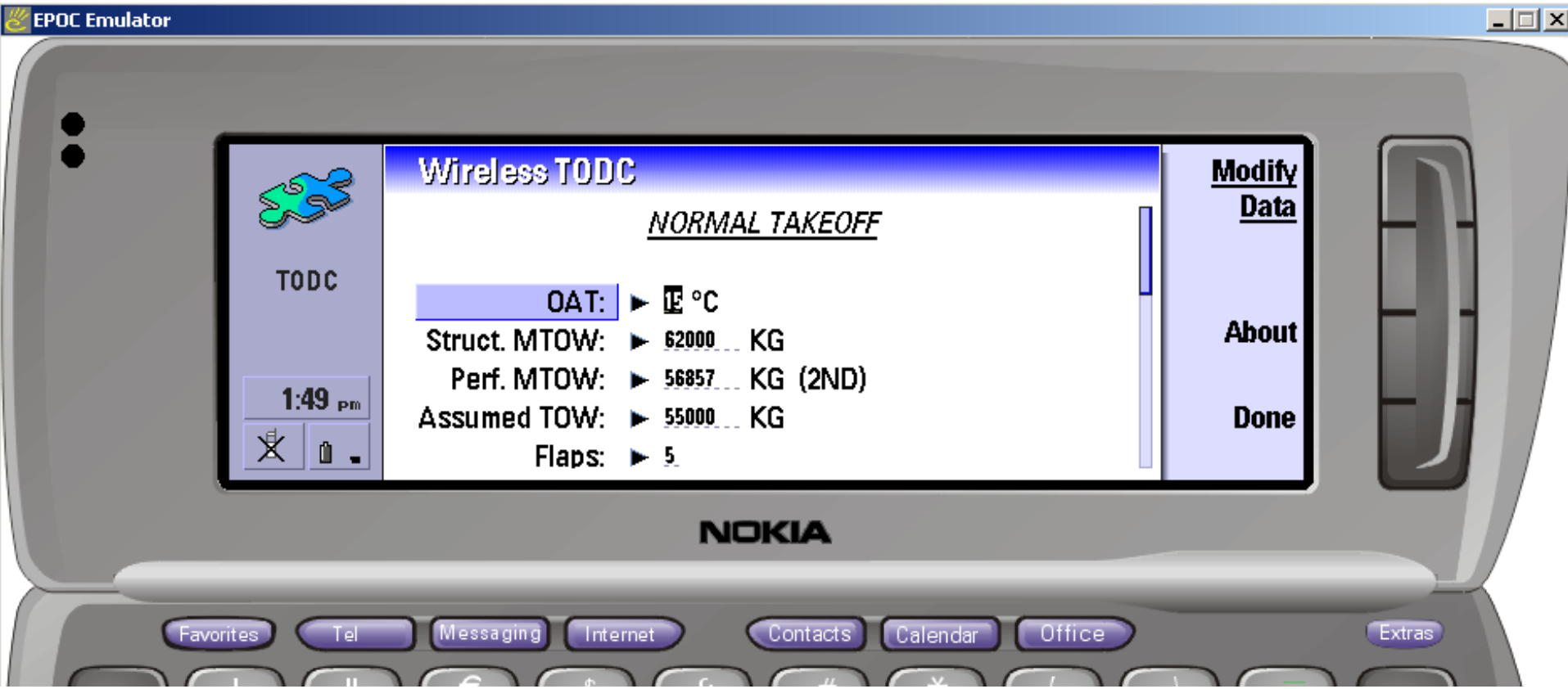

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The Wireless Aviator

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Come and have a demo on the new NOKIA 9210 communicator!

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Looking forward making a personal demonstration for you.

www.sasflightsupport.com